

Fact Sheet Addendum
For
Alcoa Wenatchee Works' NPDES Permit (WA-000068-0)
January 2009

By letter dated December 26, 2008, Alcoa Wenatchee requested that Ecology modify several provisions in its NPDES permit. Alcoa requested that Ecology:

- Include a footnote in S1.A regarding the discharge limits for TSS and Aluminum that would allow Alcoa to subtract or net out the amount of these pollutants present in the intake water.
- Include a footnote in S1.B regarding pH and flow in the sanitary treatment plant discharge limits similar to footnote "h" in S1.A to define "continuous" monitoring in order to allow for brief interruptions for calibration, for power failure, or for unanticipated equipment repair or maintenance, and to describe monitoring requirements during such times.
- Revise footnote "g" in S1.A to end the requirement for monitoring certain parameters during diversion.

Ecology proposes to modify the permit to address Alcoa's requests for the following reasons:

1. Addition of a netting out allowance

40 CFR 122.45(g) provides in part:

“Pollutants in intake water. (1) Upon request of the discharger, technology-based effluent limitations or standards shall be adjusted to reflect credit for pollutants in the discharger’s intake water if:

.....

(ii) The discharger demonstrates that the control system it proposes or uses to meet applicable technology-based limitations and standards would, if properly installed and operated, meet the limitations and standards in the absence of pollutants in the intake waters.

.....

(4) Credit shall be granted only if the discharger demonstrates that the intake water is drawn from the same body of water into which the discharge is made.

Alcoa’s Wenatchee facility discharges non-contact cooling water, boiler blowdown water, domestic wastewater, storm water runoff and other miscellaneous process wastewater via outfall 001 to the Columbia River. The domestic water makes up around one percent of the facility’s overall water usage. Alcoa draws the non-contact cooling water from the Columbia River, the same body of water into which it discharges. The control system used by Alcoa has demonstrated ability to meet the applicable technology-based limits. TSS and aluminum are naturally present in the Columbia River and may vary with season and flow. Since the TSS and aluminum levels in the effluent do not fully represent the impacts from the smelter, Alcoa requested that Ecology add a netting out provision in S1.A for its limits for TSS and Aluminum. Ecology had provided a similar provision in Alcoa’s previous permit but failed to include it in the permit reissued May 17th, 2006. To address Alcoa’s concerns, Ecology proposes to add the following footnote (i) to S1.A for TSS and Aluminum:

ⁱ The Permittee may subtract the amount of pollutants present in its intake water as determined by analysis from the amount present in its discharge water and report the calculated value. The Permittee must include both the intake water and the actual discharge values in the data summary sheets required by permit condition S2.D.

2. Add a footnote to qualify the meaning of “continuous” monitoring of pH and flow for the sanitary treatment plant discharge

The permit requires continuous monitoring of pH and flow for the sanitary treatment plant discharge. A footnote (j) to qualify the meaning of “continuous” for both of these parameters is requested as follows:

^j Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or

maintenance. In the event of a failure of flow and pH monitoring equipment, grab samples shall be collected once per day during normal business hours.

Ecology believes that the permit does not need specific backup monitoring provisions for flow during such down times because the sanitary treatment plant serves a steady work population and has shown considerable consistency in flow volume. The single pH measurement per day provision is similar to the recommended monitoring for small municipal discharges as described in chapter XIII of Ecology's *Permit Writer's Manual*.

3. Remove the monitoring requirements for TSS, Fluoride, Aluminum and O&G during diversion.

Footnote "g" in S1.A specifically applies to the sample type and monitoring requirements for TSS, Fluoride, Aluminum and O&G. The footnote imposes a grab sample monitoring requirement for these parameters during diversion. Note that the second paragraph in S1.A provides that "Water diverted to the holding ponds and not discharged through Outfall 001 is not subject to effluent limitations included in S1A." Ecology included this monitoring during diversion to gather information. Alcoa has taken 27 samples during diversions in the past two years, including diversions for storm events, and diversions for various types of maintenance activities. Alcoa provided this data and Ecology included the information in **Appendix B**.

Ecology concurs that Alcoa has completed sufficient monitoring to illustrate the characteristics during diversion. Ecology proposes to change footnote "g" as follows:

^g A 24 hr comp sample is defined as a 24 hour flow proportional composite sample. During a diversion, the Permittee may suspend composite sampling.

During a large storm water diversion, the holding pond can hold the storm water for 5-6 days. If Ecology assumes that the storm water ends up in the Columbia River, the fluoride and aluminum should not exceed the monthly average/daily maximum limits for fluoride (25/150 lbs) and aluminum (15/46). Alcoa's Diversion Data sheet shows that the largest fluoride and aluminum loading (217 lbs and 91 lbs) to the holding pond occurred on November 6, 2006. Alcoa would not have exceeded the daily maximum if you divide these loadings by 5 or 6 days. The monthly average reported values of 2.3 lbs/day for fluoride and 1.6 lbs/day for aluminum would not exceed the monthly average limits of 25 lbs/day for fluoride and 15 lbs/day for aluminum, respectively if included in the data to calculate averaging loading for that month.

Ecology must public notice the availability of the draft modified permit at least 30 days before it modifies the permit [Washington Administrative Code (WAC) 173-220-050]. Ecology invites you to review and comment on its decision to modify the permit (see **Appendix A - Public Involvement** for more detail on the Public Notice procedures).

After the public comment period has closed, Ecology will prepare a response to comments document that it will attach to this fact sheet addendum. The response to comments will include the resultant changes to the permit and either address each comment individually or summarize the substantive comments and respond. Ecology sends a copy of the response to comments to all parties who submitted comments. Ecology will include the response to comments in this fact sheet addendum.

APPENDIX A--PUBLIC INVOLVEMENT INFORMATION

Ecology proposes to modify the permit to Alcoa Wenatchee. The permit includes wastewater discharge limits and other conditions. This fact sheet addendum describes the facility and Ecology's reasons for modifying the permit conditions.

Ecology placed a Public Notice of Application on February 10, 2009 and March 13, 2009 in the Wenatchee Public Library to inform the public about the submitted application and to invite comment on the reissuance of this permit.

Ecology will place a Public Notice of Draft on February 10, 2009 in the Wenatchee Public Library to inform the public and to invite comment on the proposed draft National Pollutant Discharge Elimination System permit and fact sheet addendum.

The Notice –

- Tells where copies of the draft Permit and Fact Sheet are available for public evaluation (a local public library, the closest Regional or Field Office, posted on our website.).
- Offers to provide the documents in an alternate format to accommodate special needs.
- Urges people to submit their comments, in writing, before the end of the Comment Period
- Tells how to request a public hearing of comments about the proposed NPDES Permit.
- Explains the next step(s) in the permitting process.

Ecology has published a document entitled **Frequently Asked Questions about Effective Public Commenting** which is available on our website at <http://www.ecy.wa.gov/biblio/0307023.html>.

You may obtain further information from Ecology by telephone, Robert King, (360) 407-7563, or by writing to the permit writer at the address listed below.

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The primary author of this permit and fact sheet modification is Robert King.